Amendments to the Drawings

The attached replacement sheet of drawings includes changes to FIG. 4H and replaces the original sheet including FIGS. 4A-4H.

In FIG. 4H, erroneous lines and resist have been deleted. The changes are supported by para. [0064], which describes the stripping of photoresist 422.

Attachments following last page of this Amendment:

Replacement Sheet (1 page)

Annotated Sheet Showing Change(s) (1 page)

REMARKS

Claims 11-18 and 30-34 are pending. Claims 1-10 and 19-29 have been canceled pursuant to their withdrawal from consideration, without disclaimer, and subject to applicant's right to pursue the subject matter of the canceled claims in a divisional application. Claims 11 and 30 are the remaining independent claims.

In the action mailed September 8, 2006, claims 12, 16, and 18 were rejected under 35 U.S.C. § 112, second paragraph as indefinite. These claims have been amended to address the Examiner's concerns.

Claim 11 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,415,835 to Brueck et al. (hereinafter "Brueck").

As amended, claim 11 relates to a method that includes exposing a periodic pattern of alternating non-exposed lines and exposed spaces on a first photoresist, exposing a portion of at least one line to radiation to break continuity of the line and regularity of the periodic pattern by positioning an exposed region with a second width to expose the at least one line, developing the first photoresist, forming a second photoresist over the first photoresist, exposing an area of the second photoresist to form a feature over the formerly periodic pattern of the first photoresist, developing the second photoresist, and etching a support using both the first photoresist and the second photoresist as a guide in a same etch step. The lines have a first width. The second width is greater than the first width. The feature has a third width that is greater than the first width.

The rejection of claim 11 is based on the contention that Brueck's description of successive pattern transfers, each from a different single layer of photoresist, involves the formation of a second photoresist over a first photoresist as recited in claim 1.

Applicant respectfully disagrees. In this regard, there is no teaching in Brueck that the original layer of photoresist remains on Brueck's substrate so that Brueck's second photoresist layer can be formed "over" it, as recited in claim 1. This would be an inconventional use of photoresist. Instead, it would appear likely that Brueck's first layer is removed after pattern development and transfer, as conventional and as described in col. 4, line 31-36.

Moreover, claim 11 has been amended to recite that a support is etched using both the first photoresist and the second photoresist as a guide in a same etch step. Such an etching is supported by, e.g., para. [0061] of the specification, which describes that patterned photoresists are ready for subsequent processes, such as etching.

Since pattern transfer from multiple resist layers in Brueck requires multiple etch steps, the recited etching using both the first photoresist and the second photoresist as a guide in a same etch step is neither described nor suggested by Brueck.

Accordingly, claim 11 is not anticipated by Brueck. Applicant respectfully requests that the rejections of claim 11 and the claims dependent therefrom be withdrawn.

Claim 30 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent Publication No. 2002/0078427 to Palmer et al. (hereinafter "Palmer").

Claim 30 relates to a method that includes receiving a predetermined design layout, receiving a pattern layout of alternating, parallel lines and spaces, and subtracting the design layout from the pattern layout of alternating, parallel lines and spaces to form a remainder layout.

The rejection of claim 30 contends that Palmer involves subtracting a design layout from a pattern layout of alternating, parallel lines and spaces. Applicant respectfully disagrees.

In this regard, Palmer describes an IC layout verification technique that uses proximity correction. *See, e.g., Palmer*, para. [0004]. According to Palmer, proximity correction is a technique in which the layout of the mask pattern is altered to correct for nonlinear behavior of light and etch interactions during patterning. *See, e.g., Palmer*, para. [0002]. In particular, a theoretical mask pattern is "proximity corrected using an iterative process that accounts for the multitude of different interactions that cause distortions and variations from the desired pattern which is to be reproduced…". *Id.*

Palmer indicates that the process flow in Palmer's FIG. 6 can be used to generate such a proximity corrected mask pattern. *See, e.g., Palmer*, para. [0024]. The rejection contends that this process flow involves the subtraction of a design layout from a pattern layout, as recited in claim 30.

Applicant respectfully disagrees. Nowhere does Palmer describe that the theoretical mask pattern is to be subtracted from the proximity-corrected mask pattern, or vice-versa. This is perhaps not surprising, given that the proximity-corrected mask pattern is just a corrected version of the theoretical mask pattern. Palmer does not suggest that subtraction would be useful in this context at all.

Accordingly, claim 30 is not anticipated by Palmer. Applicant respectfully requests that the rejections of claim 30 and the claims dependent therefrom be withdrawn.

Applicant asks that all claims be allowed. No fees are believed due at this time. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

BY
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